

WHAT IS CLAIMED IS:

1. An input device including:

a foldable keyboard including a first keyboard unit, a second keyboard unit, and a rotatable connecting part provided between the first and second keyboard units, so that the first and second keyboard units are rotated to come apart from each other into an unfolded, horizontally arranged state through the connecting part for use of the keyboard, while the first and second keyboard units are rotated to come close to each other into a closed, folded state through the connecting part for nonuse of the keyboard, and

a foldable flexible display rotatably attached to one edge of the first or second keyboard unit, the display being openable in correspondence with the horizontally arranged state of the first and second keyboard units and foldable in correspondence with the folded state of the first and second keyboard units.

2. The input device according to claim 1, wherein the flexible display includes:

a first cover member rotatably attached to one edge of the first or second keyboard unit;

a second cover member provided side by side with the first cover member along a long side of the opened keyboard in which the first and second keyboard units are horizontally arranged;

a joint provided between the first and second cover members;

a linkage system integrally formed with the joint at both ends thereof, the linkage system including a pair of link parts which couples the first and second cover members; and

a flexible display sheet placed over the first cover member, the joint,

and the second cover member,

the second cover member being slidable and foldable through the linkage system with respect to the first cover member.

5 3. The input device according to claim 2, wherein the flexible display is attached to one edge of the first or second keyboard unit so that the display is arranged along a direction perpendicular to an axis of the rotatable connecting part.

10 4. The input device according to claim 2, further including:
a pair of first wall portions provided in peripheral opposite edges of the first cover member;
a first groove formed in an inner surface of each first wall portion;
a pair of second wall portions provided in peripheral opposite edges
15 of the second cover member;
a second groove formed in an inner surface of each second wall portion;
wherein both side edges of the flexible display sheet are slidably held in one of the first and second grooves.

20 5. The input device according to claim 2, wherein the flexible display sheet is folded to cover from outside both surfaces of the keyboard in which the first and second keyboard units are superposed when the second cover member is folded on the first cover member.

25 6. The input device according to claim 5, wherein the joint includes a semicylindrical body having a semicylindrical curved surface, and
the flexible display sheet is folded as partially curved along the

semicylindrical curved surface when the second cover member is folded on the first cover member.

7. The input device according to claim 2, wherein the flexible
5 display sheet is an organic electroluminescence (EL) display sheet.

8. A personal computer including:

a foldable keyboard including a first keyboard unit, a second
keyboard unit, and a rotatable connecting part provided between the first
10 and second keyboard units, so that the first and second keyboard units are
rotated to come apart from each other into an unfolded, horizontally
arranged state through the connecting part for use of the keyboard, while
the first and second keyboard units are rotated to come close to each other
into a closed, folded state through the connecting part for nonuse of the
15 keyboard, and

a computer main unit provided to the first or second keyboard unit;
and

a foldable flexible display rotatably attached to one edge of the first
or second keyboard unit, the display being openable in correspondence with
20 the horizontally arranged state of the first and second keyboard units and
foldable in correspondence with the folded state of the first and second
keyboard units.

9. The personal computer according to claim 8, wherein the flexible
25 display includes:

a first cover member rotatably attached to one edge of the first or
second keyboard unit;

a second cover member provided side by side with the first cover

member along a long side of the opened keyboard in the horizontally arranged state of the first and second keyboard units;

a joint provided between the first and second cover members;

5 a linkage system integrally formed with the joint at both ends thereof, the linkage system including a pair of link parts which couples the first and second cover members; and

a flexible display sheet placed over the first cover member, the joint, and the second cover member,

10 the second cover member being slidable and foldable through the linkage system with respect to the first cover member.

10. The input device according to claim 1, wherein a resilient metallic thin plate is laminated to a rear surface of the flexible display.

15 11. The input device according to claim 10, wherein the flexible display includes:

a first cover member rotatably attached to one edge of the first or second keyboard unit and a second cover member slidably and foldably connected with the first cover member; and

20 a flexible display sheet placed over the first cover member and the second cover member, and

the resilient metallic thin plate is laminated to the flexible display sheet on a surface facing the first and second cover members.

25 12. The personal computer according to claim 8, wherein

a resilient metallic thin plate is laminated to a rear surface of the flexible display.

13. The input device according to claim 1, wherein

the flexible display includes: a cover unit having a length longer than the first or second keyboard unit; and a flexible display sheet set in the cover unit; and

5 the cover unit includes: a support portion formed at a lower end for rotatably supporting the cover unit in a cantilever state at one edge of the first or second keyboard unit; and a projection member formed at another lower end opposite to the end formed with the support portion so that a bottom surface of the projection member is flush with a bottom surface of
10 the opened keyboard.

14. The input device according to claim 13, wherein the support portion of the cover unit is connected with the one edge of the first or second keyboard unit along a direction perpendicular to an axis of the
15 connecting part.

15. The input device according to claim 13, wherein the cover unit includes:

20 a first cover member provided with a support portion and rotatably attached to the one edge of the first or second keyboard unit through the support portion;

a second cover member provided side by side with the first cover member along a long side of the opened keyboard in the horizontally arranged state of the first and second keyboard units;
25 and

a joint provided between the first and second cover members to connect the first and second cover members in a slidable and foldable relation; and

the projection member is formed at a lower part of the second cover member.

5 16. The input device according to claim 15, wherein the flexible display sheet is folded to cover from outside both surfaces of the keyboard which the first and second keyboard units are superposed when the second cover member is folded on the first cover member.

10 17. The input device according to claim 15, wherein the joint includes a semicylindrical body having a semicylindrical curved surface, and

the flexible display sheet is folded as partially curved along the semicylindrical curved surface when the second cover member is folded on the first cover member.

15

18. A personal computer including:

20 a foldable keyboard including a first keyboard unit, a second keyboard unit, and a rotatable connecting part provided between the first and second keyboard units, so that the first and second keyboard units are rotated to come apart from each other into an unfolded, horizontally arranged state through the connecting part for use of the keyboard, while the first and second keyboard units are rotated to come close to each other into a closed, folded state through the connecting part for nonuse of the keyboard, and

25 a computer main unit provided to the first or second keyboard unit; and

a foldable flexible display including a cover unit having a length longer than the first or second keyboard unit and a flexible display sheet

set in the cover unit, the cover unit including a support portion at a lower end for rotatably supporting the cover unit in a cantilever state at one edge of the computer main unit so that the display is openable in correspondence with the horizontally arranged state of the first and second keyboard units and foldable in correspondence with the folded state of the first and second keyboard units,

wherein the cover unit further includes a projection member formed at another lower end opposite to the end formed with the support portion so that a bottom surface of the projection member is flush with a bottom surfaces of the opened keyboard and the computer main unit.

19. The input device according to claim 1, wherein the flexible display is widened from the folded state to a state extending in a direction parallel to a long side of the keyboard in which the first and second keyboard units are horizontally arranged.

20. The input device according to claim 19, wherein the keyboard has a first length in the horizontally arranged state of the first and second keyboard units, and

the flexible display includes a display part having a length substantially equal to the first length, and the flexible display is folded, due to the flexibility, to another length substantially equal to a second length of the folded keyboard in which the first and second keyboard units are superposed one on top of the other through the connecting part.

21. The input device according to claim 19 further including a control unit united with the first or second keyboard unit and used for controlling the keyboard and the flexible display,

wherein the flexible display is rotatably attached to one edge of the control unit and has a width corresponding to a total width of the first or second keyboard unit and the control unit.

5 22. The personal computer according to claim 8, wherein the flexible display is widened from the folded state to a state extending in a direction parallel to a long side of the keyboard in which the first and second keyboard units are horizontally arranged.

10 23. The personal computer according to claim 22, wherein the keyboard has a first length in the horizontally arranged state of the first and second keyboard units, and

the flexible display includes a display part having a length substantially equal to the first length and is folded, due to the flexibility, to
15 another length substantially equal to a second length of the keyboard in which the first and second keyboard units are superposed one on top of the other through the connecting part.

20 24. The personal computer according to claim 22, wherein the flexible display is folded to cover from outside both surfaces of the keyboard in which the first and second keyboard units are superposed one on top of the other.

25 25. The personal computer according to claim 22, wherein the flexible display has a width corresponding to a total width of the first or second keyboard unit and the control unit.

26. The input device according to claim 1, wherein the keyboard has

a first length in the horizontally arranged state of the first and second keyboard units, and

the flexible display includes a display part having a length substantially equal to the first length and is folded, due to the flexibility, to another length substantially equal to a second length of the keyboard in which the first and second keyboard units are superposed one on top of the other through the connecting part.

27. The input device according to claim 1, wherein the first and second keyboard units each are of a rectangular shape having long sides and short sides, and

the flexible display is folded along the long sides.

28. The input device according to claim 27, wherein the keyboard in which the first and second keyboard units are horizontally arranged has an open length in parallel to the long side of the keyboard unit, and

the flexible display includes a landscape display part having a length substantially equal to the open length of the keyboard, and the flexible display is folded, due to the flexibility, to another length substantially equal to a length of the long side of the folded keyboard in which the first and second keyboard units are superposed through the connecting part.

29. The input device according to claim 27 further including a control unit united with the first or second keyboard unit and used for controlling the keyboard and the flexible display,

wherein the flexible display is rotatably attached to one edge of the control unit and has a width corresponding to a total width of the first or second keyboard unit and the control unit in a direction of the short side.

30. The input device according to claim 1, the first and second keyboard units each are of a rectangular shape having long sides and short sides, and

5 the flexible display is folded along the short sides.

31. The input device according to claim 30 further including a control unit united with the first or second keyboard unit and used for controlling the keyboard and the flexible display,

10 wherein the flexible display is rotatably attached to one edge of the control unit and includes a portrait display part having a width substantially equal to the length of the long side of the folded keyboard in which the first and second keyboard units are superposed, so that the flexible display is folded to another width substantially equal to a total
15 width of the first or second keyboard unit and the control unit in a direction of the short side.

32. The input device according to claim 1, wherein the flexible display is folded to cover from outside both surfaces of the keyboard in
20 which the first and second keyboard units are superposed.

33. A display including:

a first cover member;

a second cover member provided side by side with the first cover
25 member;

a joint provided between the first and second cover members;

a linkage system integrally formed with the joint at both ends thereof, the linkage system including a pair of link parts which couples the

first and second cover members; and

a flexible display sheet placed over the first cover member, the joint,
and the second cover member,

the second cover member being slidable and foldable through the
5 linkage system with respect to the first cover member.